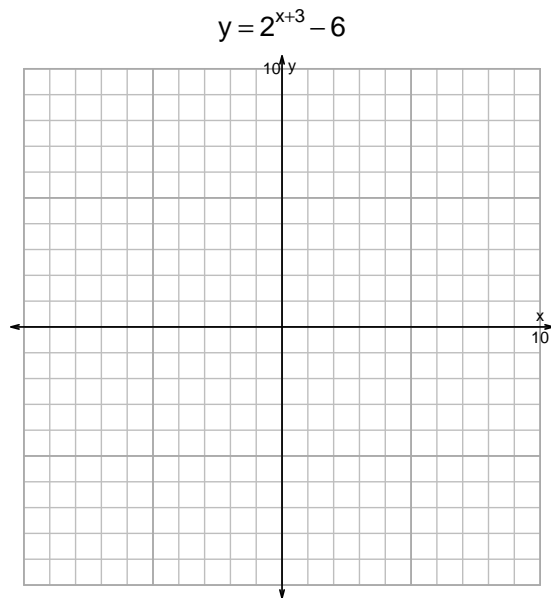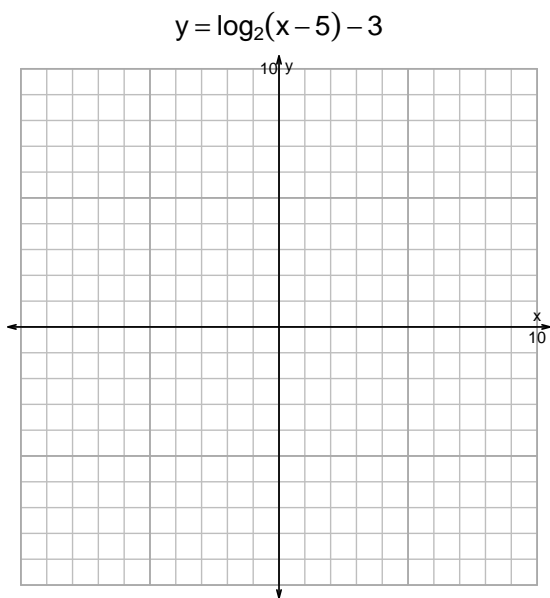Name: _____   Date: _____

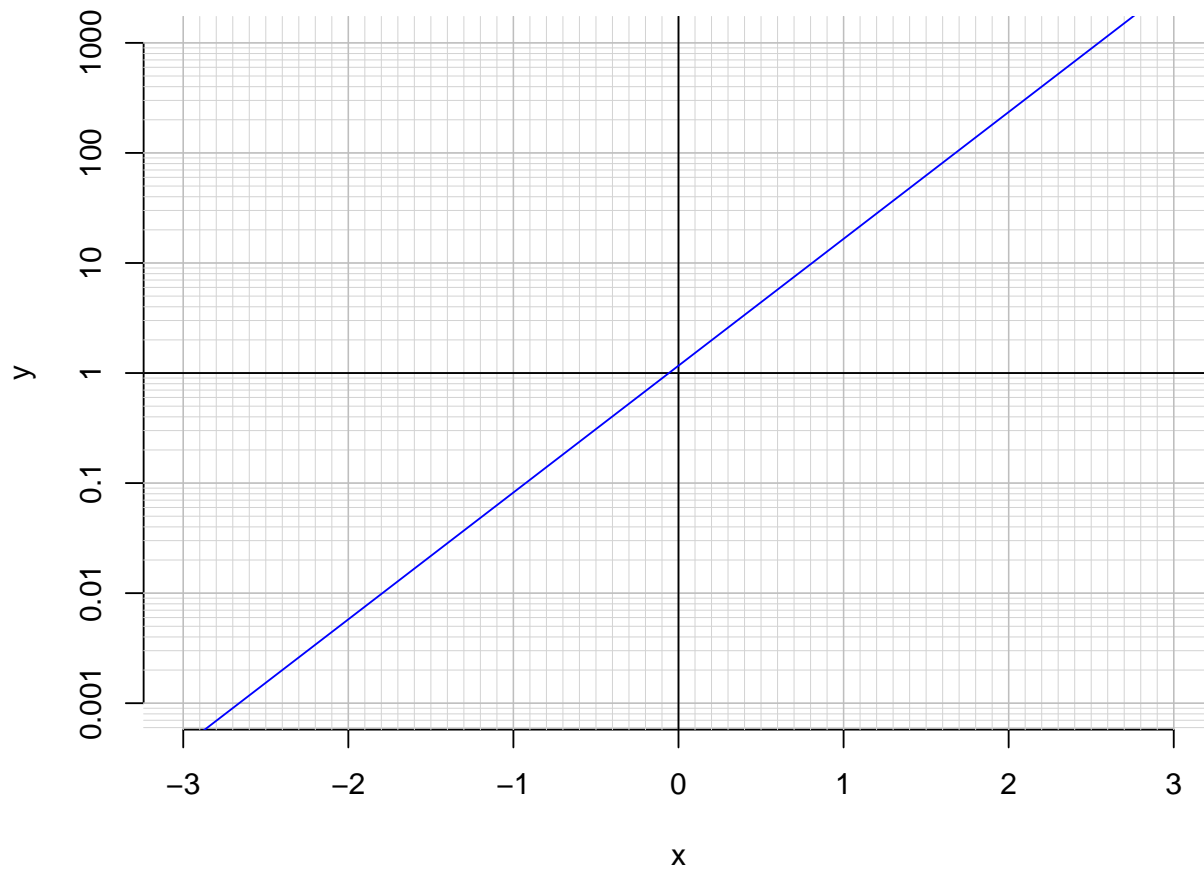## s18QUIZ: EXP LOG (QUIZ v265)

1. Graph $y = \log_2(x-5) - 3$ and $y = 2^{x+3} - 6$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x-5) - 3$$

$$y = 2^{x+3} - 6$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$23 = \left(\frac{4}{7}\right) \cdot 2^{-3t/5}$$

3. An exponential function $f(x) = 1.17 \cdot e^{2.65x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-2.4)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(400)$.